

*Séminaire SOLEIL*

## Which future for an Atomic Force Microscope used as Synchrotron Radiation sample holder ?

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*Invités par Jean-Pascal RUEFF*

**Vendredi 15 janvier à 15h00**  
**Grand Amphi SOLEIL**

For those that work with Synchrotron Radiation there is little doubt that SR represents the most versatile tool for characterise and explore the nanoworld. Nevertheless one important feature is absolutely absent from the panoply of SR feature : touching.

SR cannot touch samples, cannot modify them mechanically cannot make “constructions” under the X-ray beam.

The realm of touching and feeling is the realm of Scanning Probe Microscopes, and Atomic Force Microscope in prism, where the tip plays the double role of interaction tool and force detector. But in Atomic Force Microscopy the tip can also be used as a photon and/or electron detector; a very local, specific detector capable of localising nanosamples and detect their emission.

The merging of the two techniques, Scanning Probe Microscopy and Synchrotron Radiation, then, opens new perspectives in their joint exploitation and represent a new way of seeing and thinking a beamline endstation.

The presentation will give some examples of the different utilisations of an Atomic Force Microscope specifically designed for being installed in standard X-Ray beamlines. In particular, it will emphasize the instrumental and scientific outcome of the instrument and outline the range of future perspectives.

**Formalités d'entrée** : accès libre dans l'amphi du Pavillon d'Accueil. Si la manifestation a lieu dans le Grand Amphi Soleil du Bâtiment Central, merci de vous munir d'une pièce d'identité (à échanger à l'accueil contre un badge d'accès).

SYNCHROTRON SOLEIL

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